



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Anspach

Examiner: Chang, Victor S.

Serial No.: 09/685,305

For:

Art Unit: 1771

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SELF-ADHERING SURFACE

COVERING AND METHOD OF MAKING)

## DECLARATION OF KEAN ANSPACH UNDER 37 C.F.R. § 1.132

Kean M. Anspach declares that:

- 1. I am a citizen of the United States of America, and my residence and post office address is 294 Stoney Hill Road, Quarryville, PA 17566.
- 2. I obtained a Bachelor's Degree in Chemical Engineering from Penn State University in June of 1979.
- 3. I am the sole inventor of the utility patent application entitled "Self Adhering Surface Covering and Method of Making" having Serial No. 09/685,304, filed in the U.S. Patent and Trademark Office on October 10, 2000 ("the '305 Application"), and assigned to Armstrong World Industries, Inc. ("Armstrong") of Lancaster, Pennsylvania.



- I have been in the employ of Armstrong since 1979. Since 1979, I have been engaged in the research and development of various flooring materials, manufacturing processes and equipment, and installation systems and techniques. I have successfully developed and launched more than 4 new flooring products that have been commercially successful. During my 23 years, I have developed considerable experience in flooring materials and processes, as well as final product testing methodology.
- 5. I am familiar with the hollow glass beads disclosed in U.S. Patent No. 6,194,064 to Keely et al. During experimental studies related to my invention, I tried to use hollow glass beads similar to those disclosed in Keely et al. I chose hollow glass beads with much higher crushing strength than that disclosed in Keely et al., anticipating that Keely et al. 's materials would be too weak in my invention. The crushing strength of these materials is measured by placing the hollow glass beads with in a pressure chamber and the air pressure is increased to the desired level. Subsequently, the hollow glass beads are analyzed to determine the amount of crushing that has occurred at the given pressure. Keely et al., column 6, lines 29- I found that such beads, even with higher crush resistance, are incompatible with the desired results of the present invention claimed in the '305 Application. The use of hollow glass beads requires that a substantial portion of the adhesive surface be covered with the beads to prevent the tiles of Table 1 from sticking to one another. These hollow glass beads proved fragile and crushed too easily to be spaced far apart. The crushing of such a large number of glass beads resulted in a

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dust that covered the adhesive and prevented the tile from sticking to the floor. Additionally, I found that the tile of Table 1 having more than 10% of its surface area covered with non-adhesive particles in a random pattern would be prevented from sticking to a surface because of the resulting dust created by the crushed particles.

Additionally, the wall covering taught in *Keely et al.* would not inherently prevent such a covering from sticking to adjacent articles during storage if the adhesive layer was limited to a coverage of about 1% to about 10% of non-adhesive particles. In fact, *Keely et al.*, column 6, line 51-60, describes that the use of a release sheet is preferred so that the wallpaper does not stick to itself due to pressure during winding, and that the rolls should be stored in an upright, vertical position to keep pressure low. This is exactly the nature of the problem my invention solves.

Additionally, the hollow glass beads of *Keely et al.* are mixed into the adhesive and applied to the wall covering. Therefore, the hollow glass beads are located within the adhesive layer, in contact with the substrate and with some portion extending above the adhesive surface – see fig 1. I calculate the surface area occupied by *Keely et al.* 's hollow glass beads to be about 13%. In my invention, the particles are substantially located on the surface of the adhesive layer. Therefore, the physical arrangement is different and than in *Keely et al.* Additionally, *Keely et al.* teaches a flexible wall covering (wallpaper). The flooring tiles or sheet structures of the present application are substantially more

rigid than wallpaper and act as a bridge between the spaced non-adhesive particles residing on the adhesive layer. Therefore, the effect of pressure (including weight of the product) on my invention is significantly different than that taught by *Keely et al.*, because of these structural differences.

7. Additionally, Keely et al. does not teach the importance of a using a non-stringing adhesive. This is important in our application due to the structural differences noted above.

Respectfully submitted,

9/17/02 Date

<u> Kean M. Angrach</u> Kean M. Anspach